1. A method of displaying a molecule of interest on a surface lattice protein, the method comprising contacting the surface lattice protein with a chimera comprising the molecule of interest and a dispensable polypeptide that binds to the surface lattice protein.

2. The method of claim 1, wherein the molecule of interest is a polypeptide.

3. The method of claim 2, wherein the polypeptide consists of more than 6 amino acid residues.

4. The method of claim 3, wherein at least 100 copies of the polypeptide are displayed.

5. The method of claim 2, wherein the polypeptide is a first member of a binding pair.

6. The method of claim 5, wherein the first member of a binding pair is a receptor, a ligand, an antigen, an antibody, or an enzyme.

7. The method of claim 1, wherein the molecule of interest comprises an aromatic hydroxy acid.

8. The method of claim 7, wherein the aromatic hydroxy acid is bound directly to the dispensable polypeptide.

9. The method of claim 7, wherein the aromatic hydroxy acid is bound to the dispensable polypeptide via a linker.

10. The method of claim 9, wherein the linker comprises at least one amino acid residue.

11. The method of claim 1, wherein the molecule of interest comprises an alcohol.

12. The method of claim 11, wherein the alcohol is bound directly to the dispensable polypeptide.

13. The method of claim 11, wherein the alcohol is bound to the dispensable polypeptide via a linker.

14. The method of claim 13, wherein the linker comprises at least one amino acid residue.

15. The method of claim 1, wherein the surface lattice protein comprises a virion surface lattice protein.

16. The method of claim 15, wherein the virion surface lattice protein is gp23*.

17. The method of claim 1, wherein the surface lattice protein comprises a polyhead surface lattice protein.

18. The method of claim 1, wherein the dispensable polypeptide is a small outer capsid polypeptide (SOC).

19. The method of claim 1, wherein the dispensable polypeptide is a highly antigenic outer capsid polypeptide (HOC).

20. The method of claim 15, wherein the virion surface lattice protein is a double stranded DNA phage surface lattice protein.

21. The method of claim 20, wherein the double stranded DNA phage surface lattice protein is a T4 surface lattice protein.

22. A method of displaying a polypeptide of interest on the surface of a virion from which all or part of the nucleic acid encoding a wild type dispensable protein has been deleted, the method comprising integrating into the genome of the virion a chimeric nucleic acid molecule comprising a nucleic acid sequence encoding a dispensable polypeptide that binds to a surface lattice protein of the virion and a nucleic acid sequence encoding the polypeptide of interest.

23. The method of claim 22, wherein the dispensable polypeptide is a small outer capsid protein (SOC).

24. The method of claim 22, wherein the dispensable polypeptide is a highly antigenic outer capsid protein (HOC).

25. The method of claim 22, wherein the polypeptide of interest consists of more than 6 amino acid residues.

26. The method of claim 25, wherein at least 100 copies of the polypeptide of interest are displayed.

1 27. The method of claim 22, wherein the polypeptide of interest is a first member of a binding pair.

1 28. The method of claim 27, wherein the first member of the binding pair is a receptor, a ligand, an antigen, an antibody, or an enzyme.

1 29. The method of claim 22, wherein the virion is a double stranded DNA phage.

1 30. The method of claim 29, wherein the double stranded DNA phage is T4.

1 31. The method of claim 22, wherein the chimeric nucleic acid molecule integrated into the genome of the virion is within a plasmid.

1 32. The method of claim 31, wherein the plasmid comprises a nucleic acid sequence encoding a dispensable polypeptide.

1 33. The method of claim 32, wherein the plasmid further comprises a nucleic acid encoding a T4 lysozyme gene (*e'*) and a T4 *denV'* gene.

34. The method of claim 32, wherein the plasmid comprises a promoter.

35. The method of claim 34, wherein the promoter is IPIII.

1 36. The method of claim 22, wherein the chimeric nucleic acid molecule integrated into the genome of the virion is approximately 16 kilobases long.

37. A method of immunizing a mammal, the method comprising administering to the mammal an antigenic composition comprising a surface lattice protein that is bound to a chimeric polypeptide, the chimeric polypeptide comprising an antigenic polypeptide of interest and a dispensable polypeptide that binds to the surface lattice protein.

38. The method of claim 37, wherein the surface lattice protein comprises a virion surface lattice protein.

39. The method of claim 37, wherein the surface lattice protein comprises a polyhead surface lattice protein.

40. The method of claim 37, wherein the dispensable polypeptide is a small outer capsid polypeptide (SOC).

41. The method of claim 37, wherein the dispensable polypeptide is a highly antigenic outer capsid polypeptide (HOC).

42. A method of treating a mammal having a disorder associated with aberrent expression or activity of a biological molecule, the method comprising administering to the mammal a therapeutic composition comprising a surface lattice protein that is bound to a chimeric polypeptide, the chimeric polypeptide comprising an immunoglobulin molecule that specifically binds the biological molecule and a dispensable polypeptide that binds the surface lattice protein.

43. A therapeutic composition comprising a surface lattice protein that is bound to a chimera comprising a molecule of interest and a dispensable polypeptide that binds to the surface lattice protein.

44. The therapeutic composition of claim 43, wherein the surface lattice protein is a virion surface lattice protein.

45. The therapeutic composition of claim 43, wherein the surface lattice protein comprises a polyhead surface lattice protein.

46. The therapeutic composition of claim 43, wherein the dispensable polypeptide is a small outer capsid polypeptide (SOC).

47. The therapeutic composition of claim 43, wherein the dispensable polypeptide is a highly antigenic outer capsid polypeptide (HOC).

48. A phage comprising a nucleic acid molecule encoding a polypeptide of interest and a dispensable polypeptide that binds to a surface lattice protein of the phage.

49. The phage of claim 48, wherein the dispensable polypeptide is a small outer capsid polypeptide (SOC).

50. The phage of claim 48, wherein the dispensable polypeptide is a highly antigenic outer capsid polypeptide (HOC).

51. A chimeric polypeptide comprising a dispensable polypeptide that binds to a surface lattice protein and a polypeptide of interest.

52. The chimeric polypeptide of claim 51, wherein the dispensable polypeptide is a small outer capsid polypeptide (SOC).

53. The chimeric polypeptide of claim 51, wherein the dispensable polypeptide is a highly antigenic outer capsid polypeptide (HOC).

54. The chimeric polypeptide of claim 51, wherein the polypeptide of interest is a first member of a binding pair.

55. The chimeric polypeptide of claim 54, wherein the first member of the binding pair is a receptor, a ligand, an antigen, or an antibody.

56. A nucleic acid molecule encoding the polypeptide of claim 51.